

Election of Inventions:

The Patent Examiner has required the selection of one of the following inventions for further prosecution:

Group I: An apparatus for and method of continuous determination of a parameter characterizing a patient's left ventricular pumping action.

Group II: An apparatus for and method of continuous determination of the cardiac volume responsiveness indicator.

The Examiner has required election of one species from each of the following three sets of groups if Group II above is elected:

A or B

C or D

E or F

A: An apparatus or method for continuous determination of the cardiac volume responsiveness indicator, wherein the first reading is a size of the left ventricle determined by means of

X-ray densitometry, positron emission tomography, transesophageal echo cardiography, transthoracic echo cardiography, or other two or three dimensional imaging techniques.

B: An apparatus or method for continuous determination of the cardiac volume responsiveness indicator, wherein the first reading is a reading determined by a measurement selected from plethysmography, measuring electric impedance, measuring electric conductivity, ultrasound, measuring the pressure in the Arteria plumonalis, and direct flow measurement.

C: An apparatus or method for continuous determination of the cardiac volume responsiveness indicator, wherein the adaptation parameters k , l and m are adaptation functions.

D. An apparatus or method for continuous determination of the cardiac volume responsiveness indicator, wherein the adaptation parameters k , l and m are experimentally calculated constants.

E. An apparatus or method for continuous determination of the cardiac volume responsiveness indicator, wherein the third reading at least approximately corresponds to the patient's

thoracic compliance.

F. An apparatus or method for the continuous determination of the cardiac volume responsiveness indicator, wherein the third reading at least approximately corresponds to the respiration pressure or the volume flow of the patient's tidal air.

ELECTION:

Applicant respectfully elects, with traverse, the invention of Group II, and subspecies B, D, and F for further prosecution, on which claims 11, 13-21, 23-25, 28, 29, 40, 42-50, 52-54 and 57-58 are readable.